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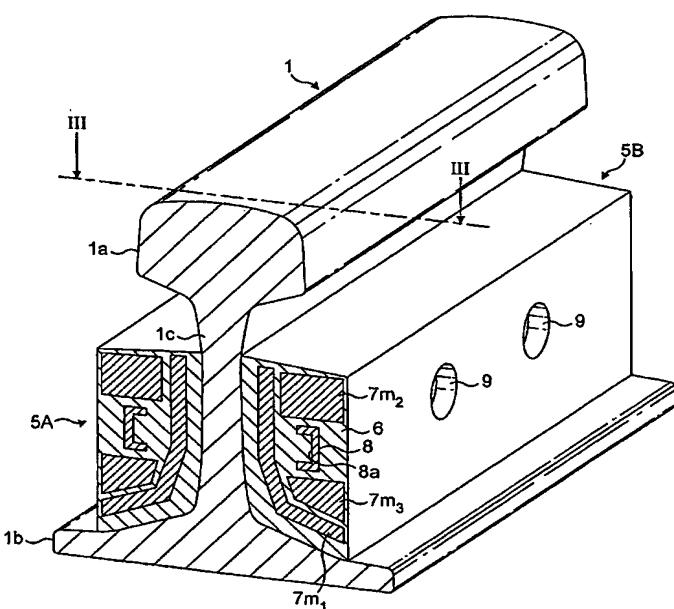
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(54) Title: TUNED ABSORBERS FOR RAILWAY RAILS



(57) Abstract: A tuned absorber (5A, 5B) for attachment to a railway rail (1) comprises a body (6) formed of elastomeric material and of at least one region of a first material, denser than the elastomeric material, located within the elastomeric material and forming an active mass (7m<sub>1</sub>, 7m<sub>2</sub>, 7m<sub>3</sub>). A member (8) of a second material denser than the elastomeric material is also located within the elastomeric material, adjacent to the active mass (7m<sub>1</sub>, 7m<sub>2</sub>, 7m<sub>3</sub>), for coupling to the rail (1) so as to provide a resonant surface against which the active mass (7m<sub>1</sub>, 7m<sub>2</sub>, 7m<sub>3</sub>) can vibrate. Alternatively, or in addition, a tuned absorber (5A, 5B) has a first active mass (7m<sub>1</sub>) and at least one further active mass (7m<sub>2</sub>, 7m<sub>3</sub>) arranged so as to be effectively coupled for vibration in a first frequency range and such that the or each further active mass (7m<sub>2</sub>, 7m<sub>3</sub>) is decoupled from the first active mass (7m<sub>1</sub>) for vibration in a second frequency range higher than the first. Alternatively, or in

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addition, attachment means for applying a securing force to maintain a tuned absorber (5A, 5B) in position on the rail web (1c) comprise a spring steel strap (40) having an overcentre device which locates on the rail foot (1b) and is operable, when snapped into a closed position, to apply a compressive force to the tuned absorber (5A, 5B).



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